

IN THE SPECIFICATION:

Please revise the specification as follows:

Please replace all of the text that appears on page 46 with the following paragraphs:

This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV-infected patient comprising: (a) collecting a biological sample from an HIV-infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 190. Using the phenotypic susceptibility assay it was observed that the presence of mutations at codon 190 correlates positively with a slight increase in delavirdine susceptibility and a large decrease in nevirapine susceptibility. In an embodiment, the mutated codon 190 codes for an alanine or a serine.

Another preferred, non-limiting, specific embodiment of the invention is as follows: a method of assessing the effectiveness of antiretroviral therapy of an HIV-infected patient comprising: (a) collecting a biological sample from an HIV-infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 230 and 181. Using the phenotypic susceptibility assay, it was observed that the presence of the mutations at codons 230 alone or in combination with a mutation at codon 181 of HIV RT causes a significant decrease in delavirdine susceptibility and a significant decrease in nevirapine susceptibility. In yet another embodiment, the mutated codon 230 codes for a leucine and codon 181 codes for a cysteine.

~~This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV infected patient comprising: (a) collecting a biological sample from an HIV-infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 181. Using the~~

~~phenotypic susceptibility assay it was observed that the presence of mutations at codon 181 correlates positively with a moderate decrease in delavirdine susceptibility and a significant decrease in nevirapine susceptibility and no change in efavirenz susceptibility. In an embodiment, the mutated codon 181 codes for a isoleucine.~~

~~— This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV infected patient comprising: (a) collecting a biological sample from an HIV infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 188. Using the phenotypic susceptibility assay it was observed that the presence of mutations at codon 188 correlates positively with a slight decrease in delavirdine susceptibility and a substantial decrease in nevirapine susceptibility and significant decrease in efavirenz susceptibility. In an embodiment, the mutated codon 188 codes for a cysteine, histidine, or leucine.~~

Please replace the text that appears on page 47 with the following paragraphs:

~~This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV-infected patient comprising: (a) collecting a biological sample from an HIV infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 190. Using the phenotypic susceptibility assay it was observed that the presence of mutations at codon 190 correlates positively with a slight increase in delavirdine susceptibility and a large decrease in nevirapine susceptibility. In an embodiment, the mutated codon 190 codes for an alanine or a serine.~~

~~Another preferred, non-limiting, specific embodiment of the invention is as follows: a method of assessing the effectiveness of antiretroviral therapy of an HIV infected patient comprising: (a) collecting a biological sample from an HIV infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 230 and 181. Using the phenotypic susceptibility assay, it was observed that the presence of the mutations at codons 230 alone or in combination with a mutation at codon 181 of HIV RT causes a significant decrease in delavirdine susceptibility and a significant decrease in nevirapine susceptibility. In yet another embodiment, the mutated codon 230 codes for a leucine and codon 181 codes for a cysteine.~~

This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV-infected patient comprising: (a) collecting a biological sample from an HIV-infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 181. Using the phenotypic susceptibility assay it was observed that the presence of mutations at codon 181 correlates positively with a moderate decrease in delavirdine susceptibility and a significant

decrease in nevirapine susceptibility and no change in efavirenz susceptibility. In an embodiment, the mutated codon 181 codes for a isoleucine.

This invention provides a method of assessing the effectiveness of antiretroviral therapy of an HIV-infected patient comprising: (a) collecting a biological sample from an HIV-infected patient; and (b) determining whether the biological sample comprises nucleic acid encoding HIV reverse transcriptase having a mutation at codon 188. Using the phenotypic susceptibility assay it was observed that the presence of mutations at codon 188 correlates positively with a slight decrease in delavirdine susceptibility and a substantial decrease in nevirapine susceptibility and significant decrease in efavirenz susceptibility. In an embodiment, the mutated codon 188 codes for a cysteine, histidine, or leucine.